

IN THE CLAIMS

The Claims are not amended. They are presented here for the Examiner's convenience.

Claims 1-12 (Canceled).

Claim 13 (Previously Presented): A polymer composition comprising

1) a polymer (P1) comprising at least 50% by weight of monomeric units derived from an ethylenically unsaturated monomer (M1), and

2) at least one co-oligomer (O1) comprising at least:

a) a component (A) comprising at least one monomeric unit identical to that derived from the monomer (M1) on which the polymer (P1) is based, and

b) a component (B) comprising at least one monomeric unit (m2), derived from an ethylenically unsaturated monomer, carrying at least one phosphonate group - PO(OH)(OR₁) with R₁ being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms,

wherein the number-average molar mass of polymer (P1) is greater than 30,000 and the number-average molar mass of co-oligomer (O1) is less than or equal to 30,000.

Claim 14 (Cancelled)

Claim 15 (Previously Presented): The composition according to Claim 13, wherein the polymer (P1) is a chlorinated polymer.

Claim 16 (Previously Presented): The composition according to Claim 13, wherein in the polymer (P1) ethylenically unsaturated monomer (M1) is vinylidene chloride, which is present in an amount of 70 to 95% by weight.

Claim 17 (Cancelled)

Claim 18 (Cancelled)

Claim 19 (Cancelled)

Claim 20 (Cancelled)

Claim 21 (Previously Presented): A process for preparing a composition according to Claim 13, comprising the mixing of the polymer (P1) and of the co-oligomer(s) (O1) in at least one solvent, the dispersion of the co-oligomer(s) (O1) in an aqueous dispersion of the polymer (P1), or the mixing of the polymer (P1) and of the co-oligomer(s) (O1) by premixing.

Claim 22 (Previously Presented): A process for coating metal, polymer, paper or cellophane surfaces with the polymer composition according to Claim 13, according to which the polymer composition is coated onto said surface, colaminated with said surface or coextruded with the material forming said surface.

Claim 23 (Previously Presented): An article or part of an article comprising the polymer composition according to Claim 13.

Claim 24 (Cancelled):

Claim 25 (Cancelled):

Claim 26 (Previously Presented): A method for producing a single-layer or multi-layer film comprising forming the film with the composition according to Claim 13.

Claim 27 (Cancelled):

Claim 28 (Previously Presented): The composition according to Claim 13, wherein the number-average molar mass of polymer (P1) is less than or equal to 2,000,000 and the number-average molar mass of co-oligomer (O1) is less than or equal to 25,000.

Claim 29 (Cancelled):

Claim 30 (Cancelled)

Claim 31 (Cancelled)

Claim 32 (Cancelled)

Claim 33 (Cancelled)

Claim 34 (Cancelled)

Claim 35 (Cancelled)

Claim 36 (Previously Presented): A polymer composition comprising

1) a polymer (P1) comprising at least 50% by weight of monomeric units derived from an ethylenically unsaturated monomer (M1), and

2) at least one co-oligomer (O1) comprising at least:

a) a component (A) comprising at least one monomeric unit identical to that derived from the monomer (M1) on which the polymer (P1) is based, and

b) a component (B) comprising at least one monomeric unit (m2), derived from an ethylenically unsaturated monomer, carrying at least one $-(CH_2)_b-CF_{2c+1}$ group with b between 1 and 11 and c greater than or equal to 5,

wherein the number-average molar mass of polymer (P1) is greater than 30,000 and the number-average molar mass of co-oligomer (O1) is less than or equal to 30,000.

Claim 37 (Previously Presented): The composition according to Claim 36, wherein the polymer (P1) is a chlorinated polymer.

Claim 38 (Previously Presented): The composition according to Claim 36, wherein in the polymer (P1) ethylenically unsaturated monomer (M1) is vinylidene chloride, which is present in an amount of 70 to 95% by weight.

Claim 39 (Previously Presented): A process for preparing a composition according to Claim 36, comprising the mixing of the polymer (P1) and of the co-oligomer(s) (O1) in at least one solvent, the dispersion of the co-oligomer(s) (O1) in an aqueous dispersion of the polymer (P1), or the mixing of the polymer (P1) and of the co-oligomer(s) (O1) by premixing.

Claim 40 (Previously Presented): A process for coating metal, polymer, paper or cellophane surfaces with the polymer composition according to Claim 36, according to which the polymer composition is coated onto said surfaces, colaminated with said surface or coextruded with the material forming said surface.

Claim 41 (Previously Presented): An article or part of an article comprising the polymer composition according to Claim 36.

Claim 42 (Previously Presented): A method for producing a single-layer or multi-layer film comprising forming the film with the composition according to Claim 36.

Claim 43 (Previously Presented): The composition according to Claim 36, wherein the number-average molar mass of polymer (P1) is less than or equal to 2,000,000 and the number-average molar mass of co-oligomer (O1) is less than or equal to 25,000.

Claim 44 (Previously Presented): The composition according to Claim 13, wherein the at least one monomeric unit (m2), derived from an ethylenically unsaturated monomer, carrying at least one phosphonate group $-\text{PO}(\text{OH})(\text{OR}_1)$ with R_1 being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms is selected from the group consisting of:
 $\text{CH}_2=\text{CR}_9-\text{CO}-\text{O}-(\text{CH}_2)_i-\text{PO}(\text{OH})(\text{OR}_1)$ with R_9 being a hydrogen atom or a methyl radical and i being between 1 and 20,
 $\text{CH}_2=\text{CR}_9-\text{CO}-\text{O}-\text{CR}_{10}\text{R}_{11}-\text{PO}(\text{OH})(\text{OR}_1)$ with R_9 being a hydrogen atom or a methyl radical and R_{10} and R_{11} , which are the same or different, being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms,

$\text{CH}_2=\text{CR}_9\text{-CO-O-CH}_2\text{-CH(OH)-CH}_2\text{-PO(OH)(OR}_1\text{)}$ with R_9 being a hydrogen atom or a methyl radical,

$\text{CH}_2=\text{CR}_9\text{-CO-O-CH}_2\text{-CH(OH)-CH}_2\text{-CO-O-(CH}_2\text{)}_2\text{-PO(OH)(OR}_1\text{)}$ with R_9 being a hydrogen atom or a methyl radical,

$\text{CH}_2=\text{CR}_9\text{-CO-O-CH}_2\text{-CH}_2\text{-NH-CO-O-(CH}_2\text{)}_i\text{-PO(OH)(OR}_1\text{)}$ with R_9 being a hydrogen atom or a methyl radical and i being between 1 and 20,

$\text{CH}_2=\text{CR}_9\text{-CO-O-CH}_2\text{-CH}_2\text{-NH-CO-O-CR}_{10}\text{R}_{11}\text{-PO(OH)(OR}_1\text{)}$ with R_9 being a hydrogen atom or a methyl radical and R_{10} and R_{11} , which are the same or different, being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms,

$\text{CH}_2=\text{C(CH}_3\text{)-C}_6\text{H}_4\text{-C(CH}_3\text{)}_2\text{-NH-CO-O-(CH}_2\text{)}_i\text{-PO(OH)(OR}_1\text{)}$ with i between 1 and 20,

$\text{CH}_2=\text{C(CH}_3\text{)-C}_6\text{H}_4\text{-C(CH}_3\text{)}_2\text{-NH-CO-O-CR}_{10}\text{R}_{11}\text{-PO(OH)(OR}_1\text{)}$ with R_{10} and R_{11} , which are the same or different, being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms and the substitution of the aromatic ring being in the meta-position,

$\text{CH}_2=\text{CH-C}_6\text{H}_4\text{-CH}_2\text{-PO(OH)(OR}_1\text{)}$ with the substitution of the aromatic ring being a mixture of ortho- and para-substitution,

$\text{CH}_2=\text{CH-PO(OH)(OR}_1\text{)}$, and

the corresponding monomers carrying at least one group $\text{-PO(OR}_1\text{)}(\text{OR}_2\text{)}$ with R_1 and R_2 , which are the same or different, representing an alkyl radical containing from 1 to 11 carbon atoms which, after total cleavage or partial cleavage, results in the phosphonate group $\text{-PO(OH)(OR}_1\text{)}$, and mixtures thereof.

Claim 45 (Previously Presented): The composition according to Claim 13, wherein the at least one monomeric unit (m_2), derived from an ethylenically unsaturated monomer,

carrying at least one phosphonate group $-\text{PO}(\text{OH})(\text{OR}_1)$ with R_1 being a hydrogen atom or an alkyl radical containing from 1 to 11 carbon atoms is selected from the group consisting of:

$\text{CH}_2=\text{CR}_9-\text{CO}-\text{O}-(\text{CH}_2)_i-\text{PO}(\text{OH})(\text{OR}_1)$ with R_9 being a hydrogen atom or a methyl radical and i being between 1 and 20,

$\text{CH}_2=\text{CR}_9-\text{CO}-\text{O}-\text{CH}_2-\text{CH}_2-\text{NH}-\text{CO}-\text{O}-(\text{CH}_2)_i-\text{PO}(\text{OH})(\text{OR}_1)$ with R_9 being a hydrogen atom or a methyl radical and i being between 1 and 20,

$\text{CH}_2=\text{CH}-\text{PO}(\text{OH})(\text{OR}_1)$, and

the corresponding monomers carrying at least one group $-\text{PO}(\text{OR}_1)(\text{OR}_2)$ with R_1 and R_2 , which are the same or different, representing an alkyl radical containing from 1 to 11 carbon atoms which, after total cleavage or partial cleavage, results in the phosphonate group $-\text{PO}(\text{OH})(\text{OR}_1)$, and mixtures thereof.

Claim 46 (Previously Presented): The composition according to Claim 36, wherein the at least one monomeric unit (m_2), derived from an ethylenically unsaturated monomer, carrying at least one $-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$ group with b between 1 and 11 and c greater than or equal to 5 is selected from the group consisting of:

$\text{CH}_2=\text{CH}-\text{CO}-\text{O}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$,

$\text{CH}_2=\text{C}(\text{CH}_3)-\text{CO}-\text{O}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$,

$\text{CH}_2=\text{CH}-\text{CO}-\text{O}-(\text{CH}_2)_f-\text{NR}_8-\text{SO}_2-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$, with R_8 being a hydrogen atom or a radical $-\text{CH}_3$ and f being between 1 and 15,

$\text{CH}_2=\text{CH}-\text{C}_6\text{H}_4-\text{CH}_2-\text{O}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$,

$\text{CH}_2=\text{CH}-\text{O}-\text{CO}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$, and

mixtures thereof.

Claim 47 (Previously Presented): The composition according to Claim 36, wherein the at least one monomeric unit (m2), derived from an ethylenically unsaturated monomer, carrying at least one $-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$ group with b between 1 and 11 and c greater than or equal to 5 is selected from the group consisting of:

$\text{CH}_2=\text{CH}-\text{CO}-\text{O}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$, and

$\text{CH}_2=\text{C}(\text{CH}_3)-\text{CO}-\text{O}-(\text{CH}_2)_b-\text{C}_c\text{F}_{2c+1}$, and

mixtures thereof.